



CLEANING THE WINTER AIR IN SOUTHERN OREGON

Residential wood stoves and fireplaces can be major sources of particulate matter (PM-10) pollution. Increased concentrations of PM-10 can affect breathing and respiratory system functioning, especially for the elderly, children, and persons suffering from chronic lung disease or heart problems. The problem becomes particularly bad when winter weather conditions, known as air inversions, cause the pollutants in the air to become trapped, allowing them to build to unhealthy levels.

In Klamath Falls, Oregon, extensive use of wood stoves and fireplaces had led to local concentrations of PM-10 that were among the highest recorded in the country. Alarming, in January 1988 Klamath Falls recorded levels five times greater than the national health standard. In 1990, during the times when concentrations of PM-10 were at their highest, school children showed significant declines in breathing and lung capabilities.

In response to this serious problem, EPA and the state of Oregon worked closely with the local community to develop public awareness and voluntary programs for restricting wood burning. From 1991 through 1993, funding from oil surplus funds, community block grants and local government sources helped residents purchase over 700 alternative heating devices that replaced poorly functioning wood stoves. In addition, the community adopted restrictions on the use of wood stoves during times of air inversions.

These actions, along with continued community education, have led to dramatic improvements in the local air quality. National health standards for PM-10 have not been exceeded since before the 1991-1992 heating season, and the prospects for continued air-quality improvement at Klamath Falls are bright.

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